American
Centrifuge
Manufacturing, LLC
A joint company between B&W and USEC

400 Centrifuge Way - Oak Ridge, TN 37830
phone: 865-241-7000 - fax: 865-241-7135

2011 MAY 17 PM 12: 42

May 12, 2011

Mr. John Trimmer
State of Tennessee
Division of Air Pollution Control
9th Floor, L&C Annex
401 Church Street
Nashville, TN 37243-1531

Subject: Submission of APC 20 and APC 22 for New Process

Dear Mr. Trimmer:

American Centrifuge Manufacturing, LLC (ACM) is planning to implement a new process involving the use of fluorine, which would result in the emission of small quantities of fluorides to the environment. This new process will be conducted at the ACM facility located at 400 Centrifuge Way, Oak Ridge, TN.

Enclosed are the APC 20 and APC 22, which are submitted in accordance with Tennessee Air Pollution Control Regulations. It is our belief that under Part 1200-3-9-.04(2)(a)3 of these regulations this process constitutes an *"insignificant activity or insignificant emissions unit."*

If you have questions or require additional information please contact me at (865) 241-7317 or by e-mail at mgknight@babcock.com.

Sincerely,

Michael G. Knight
Director
Safety, Security & Regulatory Affairs

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF AIR POLLUTION CONTROL

9th Floor, L & C Annex
401 Church Street
Nashville, TN 37243-1531
Telephone: (615) 532-0554
FAX: (615) 532-0614

NOT TO BE USED FOR TITLE V APPLICATIONS

PERMIT APPLICATION

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APC 20

PLEASE TYPE OR PRINT AND SUBMIT IN DUPLICATE FOR EACH EMISSION SOURCE. ATTACH APPROPRIATE SOURCE DESCRIPTION FORMS.

1. ORGANIZATION'S LEGAL NAME American Centrifuge Manufacturing, LLC		/ / / FOR	APC COMPANY--POINT NO.
2. MAILING ADDRESS (ST/RD/P.O. BOX) 400 Centrifuge Way		/ / / APC	APC LOG/PERMIT NO. 64598
CITY Oak Ridge	STATE TN	ZIP CODE 37830	PHONE WITH AREA CODE 865-241-7317
3. PRINCIPAL TECHNICAL CONTACT Gary Pitcher			PHONE WITH AREA CODE 865-241-7010
4. SITE ADDRESS (ST/RD/HWY) 400 Centrifuge Way			COUNTY NAME Anderson
CITY OR DISTANCE TO NEAREST TOWN Oak Ridge		ZIP CODE 37830	PHONE WITH AREA CODE 865-241-7317
5. EMISSION SOURCE NO. (NUMBER WHICH UNIQUELY IDENTIFIES THIS SOURCE)		PERMIT RENEWAL YES ( ) NO (X)	

6. BRIEF DESCRIPTION OF EMISSION SOURCE

Fluorination of Centrifuge parts.

7. TYPE OF PERMIT REQUESTED

CONSTRUCTION (XX)	STARTING DATE 06/06/2011	COMPLETION DATE 06/30/2011	LAST PERMIT NUMBER	EMISSION SOURCE REFERENCE NUMBER 01-0138
OPERATING ( )	DATE CONSTRU-CTION STARTED	DATE COMPLETED	LAST PERMIT NUMBER	EMISSION SOURCE REFERENCE NUMBER
LOCATION TRANSFER ( )	TRANSFER DATE		LAST PERMIT NUMBER	EMISSION SOURCE REFERENCE NUMBER

ADDRESS OF LAST LOCATION

8. DESCRIBE CHANGES THAT HAVE BEEN MADE TO THIS EQUIPMENT OR OPERATION SINCE THE LAST CONSTRUCTION OR OPERATING PERMIT APPLICATION.

9. SIGNATURE (APPLICATION MUST BE SIGNED BEFORE IT WILL BE PROCESSED) Michael G Knight		**DATE** 5/13/11
10. SIGNER'S NAME (TYPE OR PRINT) Michael G. Knight	**TITLE** Director, Safety, Security & Regulatory Affairs	**PHONE WITH AREA CODE** (865) 241-7317

(OVER)

TABLE OF POLLUTION REDUCTION DEVICE OR METHOD CODES
(ALPHABETICAL LISTING)

NOTE: FOR CYCLONES, SETTLING CHAMBERS, WET SCRUBBERS, AND ELECTROSTATIC PRECIPITATORS. THE EFFICIENCY RANGES CORRESPOND TO THE FOLLOWING PERCENTAGES:
HIGH: 95-99+%. MEDIUM: 80-95%. AND LOW: LESS THAN 80%.
IF THE SYSTEM HAS SEVERAL PIECES OF CONNECTED CONTROL EQUIPMENT, INDICATE THE SEQUENCE, FOR EXAMPLE: 008'010.97%.
IF NONE OF THE BELOW CODES FIT, USE 999 AS A CODE FOR OTHER AND SPECIFY IN THE COMMENTS.

NO EQUIPMENT 000
ACTIVATED CARBON ADSORPTION 048
AFTERBURNER--DIRECT FLAME 021
AFTERBURNER--DIRECT FLAME WITH HEAT EXCHANGER 022
AFTERBURNER--CATALYTIC 019
AFTERBURNER--CATALYTIC WITH HEAT EXCHANGER 020
ALKALIZED ALUMINA 040
CATALYTIC OXIDATION--FLUE GAS DESULFURIZATION 039
CYCLONE--HIGH EFFICIENCY 007
CYCLONE--MEDIUM EFFICIENCY 008
CYCLONE--LOW EFFICIENCY 009
DUST SUPPRESSION BY CHEMICAL STABILIZERS OR WETTING AGENTS 062
ELECTROSTATIC PRECIPITATOR--HIGH EFFICIENCY 010
ELECTROSTATIC PRECIPITATOR--MEDIUM EFFICIENCY 011
ELECTROSTATIC PRECIPITATOR--LOW EFFICIENCY 012
FABRIC FILTER--HIGH TEMPERATURE 016
FABRIC FILTER--MEDIUM TEMPERATURE 017
FABRIC FILTER--LOW TEMPERATURE 018
FABRIC FILTER--METAL SCREENS (COTTON GINS) 059
FLARING 023
GAS ADSORPTION COLUMN--PACKED 050
GAS ADSORPTION COLUMN--TRAY TYPE 051
GAS SCRUBBER (GENERAL: NOT CLASSIFIED) 013
LIMESTONE INJECTION--DRY 041
LIMESTONE INJECTION--WET 042
LIQUID FILTRATION SYSTEM 049
MIST ELIMINATOR--HIGH VELOCITY 014
MIST ELIMINATOR--LOW VELOCITY 015
PROCESS CHANGE 046
PROCESS ENCLOSED 054
PROCESS GAS RECOVERY 060
SETTLING CHAMBER--HIGH EFFICIENCY 004
SETTLING CHAMBER--MEDIUM EFFICIENCY 005
SETTLING CHAMBER--LOW EFFICIENCY 006
SPRAY TOWER (GASEOUS CONTROL ONLY) 052
SULFURIC ACID PLANT--CONTACT PROCESS 043
SULFURIC ACID PLANT--DOUBLE CONTACT PROCESS 044
SULFUR PLANT 045
VAPOR RECOVERY SYSTEM (INCLUDING CONDENSERS, HOODING AND OTHER ENCLOSURES) 047
VENTURI SCRUBBER (GASEOUS CONTROL ONLY) 053
WET SCRUBBER--HIGH EFFICIENCY 001
WET SCRUBBER--MEDIUM EFFICIENCY 002
WET SCRUBBER--LOW EFFICIENCY 003
WET SUPPRESSION BY WATER SPRAYS 061

TABLE OF EMISSION ESTIMATION METHOD CODES

NOT APPLICABLE EMISSIONS ARE KNOWN TO BE ZERO 0
EMISSIONS BASED ON SOURCE TESTING 1
EMISSIONS BASED ON MATERIAL BALANCE USING ENGINEERING EXPERTISE AND KNOWLEDGE OF PROCESS 2
EMISSIONS CALCULATED USING EMISSION FACTORS FROM EPA PUBLICATION NO. AP-42 COMPILATION OF AIR POLLUTANT EMISSIONS FACTORS 3
JUDGEMENT 4
EMISSIONS CALCULATED USING A SPECIAL EMISSION FACTOR DIFFERING FROM THAT IN AP-42 5
OTHER (SPECIFY IN COMMENTS) 6

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EMISSION POINT DESCRIPTION

APC 22

PLEASE TYPE OR PRINT AND SUBMIT IN DUPLICATE FOR EACH STACK OR EMISSION POINT.
ATTACH TO THE PERMIT APPLICATION.

1. **ORGANIZATION NAME**	/ / / FOR	APC COMPANY POINT NO.
American Centrifuge Manufacturing, LLC		

2. **EMISSION SOURCE NO.** (FROM APPLICATION)	FLOW DIAGRAM POINT NUMBER	/ / / APC	APC SEQUENCE NO.
01-0138			

3. **LOCATION:** →	LATITUDE	LONGITUDE	UTM VERTICAL	UTM HORIZONTAL
	36 00' 41"	84 13' 23"		

4. **BRIEF EMISSION POINT DESCRIPTION** (ATTACH A SKETCH IF APPROPRIATE):	DISTANCE TO NEAREST PROPERTY LINE (FT)
Fluorination of Centrifuge parts.	

COMPLETE LINES 5 AND 6 IF DIFFERENT FROM THAT ON THE PROCESS OR FUEL BURNING SOURCE DESCRIPTION (APC 21)

5. **NORMAL OPERATION:**	HOURS/DAY 24	DAYS/WEEK 1	WEEK/YEAR 12		DAYS/YEAR
6. **PERCENT ANNUAL THROUGHPUT:** →	DEC.-FEB. 25	MARCH-MAY 25	JUNE-AUG. 25		SEPT.-NOV. 25
7. **STACK OR EMISSION POINT DATA:**	HEIGHT ABOVE GRADE (FT) 20	DIAMETER (FT) 0.16	TEMPERATURE (°F) Ambient	% OF TIME OVER 125°F 0	DIRECTION OF EXIT (UP, DOWN OR HORIZONTAL) Horizontal
DATA AT EXIT CONDITIONS: →	FLOW (ACTUAL FT^3/MIN.) 10.5	VELOCITY (FT/SEC) 2.	MOISTURE ($GRAINS/FT^3$) Ambient		MOISTURE (PERCENT) Ambient
DATA AT STANDARD CONDITIONS:	FLOW (DRY STD. FT^3/MIN)	VELOCITY (FT/SEC) 2	MOISTURE ($GRAINS/FT^3$) Ambient		MOISTURE (PERCENT) Ambient

8. **AIR CONTAMINANTS**	ACTUAL EMISSIONS						
	EMISSIONS (LBS/HR)		CONCENTRATION	AVG. EMISSIONS (TONS/YR)	EMISSIONS* EST. METHOD	CONTROL DEVICES*	CONTROL EFFICIENCY%
	AVERAGE	MAXIMUM					
PARTICULATES	0	0	**				
SULFUR DIOXIDE	0	0	***				
CARBON MONOXIDE	0	0	PPM				
ORGANIC COMPOUNDS	0	0	PPM				
NITROGEN OXIDES	0	0	PPM				
FLUORIDES	0.000019	0.000192		0.00000017	2	050	90
OTHER(SPECIFY)							
OTHER(SPECIFY)							

(OVER)

9. **CHECK TYPES OF MONITORING AND RECORDING INSTRUMENTS THAT ARE ATTACHED**: OPACITY MONITOR ( ), SO2 MONITOR ( ), NOX MONITOR ( ), OTHER (SPECIFY IN COMMENTS) ( )	Not applicable

10. COMMENTS

11. SIGNATURE Michael G. Knight	**DATE** 5/13/11

* REFER TO THE BACK OF THE PERMIT APPLICATION FORM FOR ESTIMATION METHOD AND CONTROL DEVICE CODES.

** EXIT GAS PARTICULATE CONCENTRATION UNITS: PROCESS — GRAINS/DRY STANDARD FT3 (70°F); WOOD FIRED BOILERS — GRAINS/DRY STANDARD FT3 (70°F); ALL OTHER BOILERS — LBS/MILLION BTU HEAT INPUT.

*** EXIT GAS SULFUR DIOXIDE CONCENTRATIONS UNITS: PROCESS — PPM BY VOLUME, DRY BASES; BOILERS — LBS/MILLION BTU HEAT INPUT.